



Pyramid Learning Live

Pyramid 2023 Update

Ian Macdonald – 29th February 2024



Agenda

- Pyramid 2023 Release Series
- The Gen BI One
- The Upgrades All Around One
- The Latecomers: Features That Missed 2023.00 One
- The Last Mile of Analytics One
- Forthcoming Learning Live Sessions

Pyramid 2023 Release Series

- 2023.00
 - Major Release
 - Over 100 new & enhanced features – See [Release Notes](#) page
 - More than 60 features implemented from Customer Product Ideas forum
 - “The Last Mile of Analytics”
- 2023.01
 - Maintenance Release, but..
 - Around 20 new & enhanced features – See [Release Notes](#) page
 - A couple of significant features that didn’t make it into 2023.00
 - About 60% from customer Product Ideas forum

Pyramid 2023 Release Series

- 2023.10
 - Minor Release
 - Over 85 new and enhanced capabilities – See [Release Notes](#) page
 - More than 80% of the features are based on suggestions from customers and ideas in the Product Ideas forum
- 2023.11
 - Nominally a Maintenance Release, but...
 - More than 25 new & enhanced features, 14 from Product Ideas forum – See [Release Notes](#) Page
 - The “Gen-BI” release ~10 new features and enhancements around integration with Generative AI



Gen-AI and Natural Language

2023.11

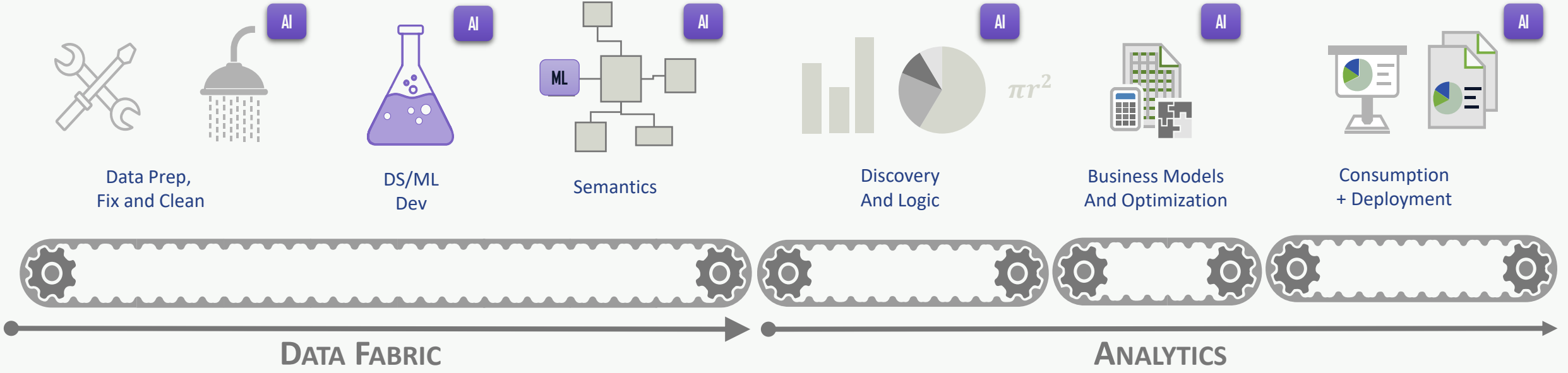


2023.11 Feature Highlights

- AI / LLM integration
 - Gen-AI / LLM Manager
 - Improved ML explanations in Discover Notes (AI)
 - AI-driven Column Categories
 - Slide Insights (AI)
 - Auto-Layout (AI)
 - Auto Slide Translations (AI)
 - Aggregate Table Recommender (AI)
 - LLM-driven data prep tools (AI)
- Other
 - Dynamic Data Masking
 - Improved Gauge Label Formatting
 - New Layout options for Present and Publish
 - OAuth Support for Athena
 - Optional Validation in Data Model
 - Option to move filter/sort panels in Discover
 - Resize of blocks & text in Formulate
 - New API options for Master Flows
 - Better handling for small fonts

AI is Pervasive in the Pyramid Platform

The **#1 Augmented (AI) Analytics** solution in the market (Gartner A&BI Critical Capabilities Report 2022 and 2023)



- Data Fabric AI:** AI Data Prep, AI Semantics, AI Translations, AutoML, DS/ML Optimization, AI Coding
- Analytics AI:** NLQ Chatbot (LLM), NLG, AI Recommendations, Smart Visuals, AI Solver, AI Content Builders, AI Formulas, AI Explanations, Smart Insights,
- AI Engines:** Pyramid Portable LM, Multiple third party LLMs*
* Currently OpenAI or Azure. Others and Private options WIP



Pyramid's Gen-AI & NLP

DIRECT ON ANY DATA SOURCE

Gen-AI that works directly
off ANY data source

You shouldn't have to change your corporate data strategy to leverage Generative AI.

FUNCTIONAL YET SECURE

Gen-AI without sharing data

Regardless of what users ask, you cannot allow sensitive data leaks

SOPHISTICATION WITH SIMPLICITY

Complex analytics with the
simplicity of conversational speech

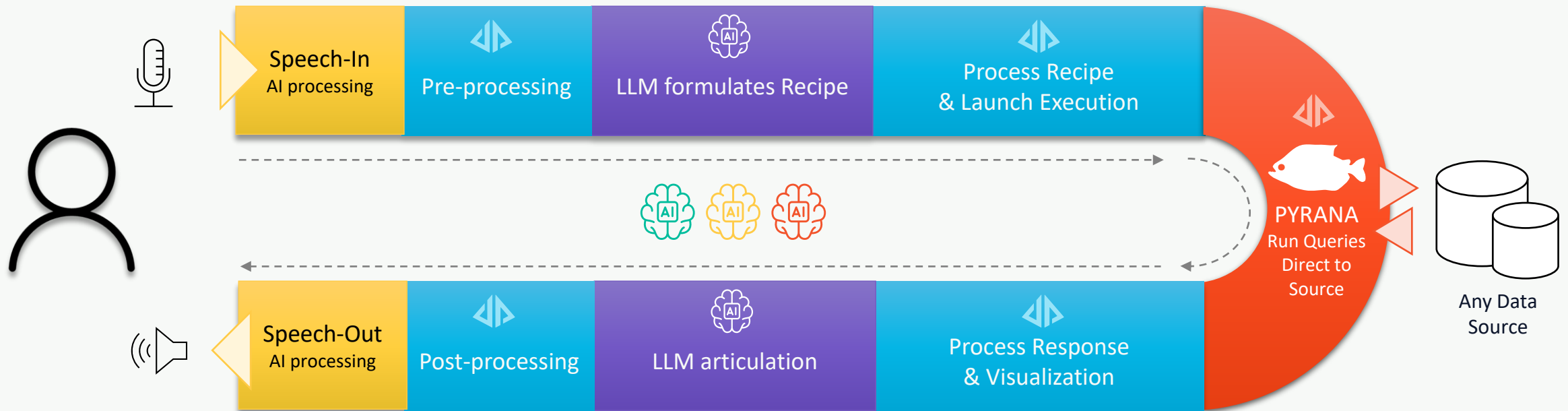
You need a real-world, conversational analytical companion to solve complicated business problems instead of a copilot without wings

MULTI-LLM STRATEGY

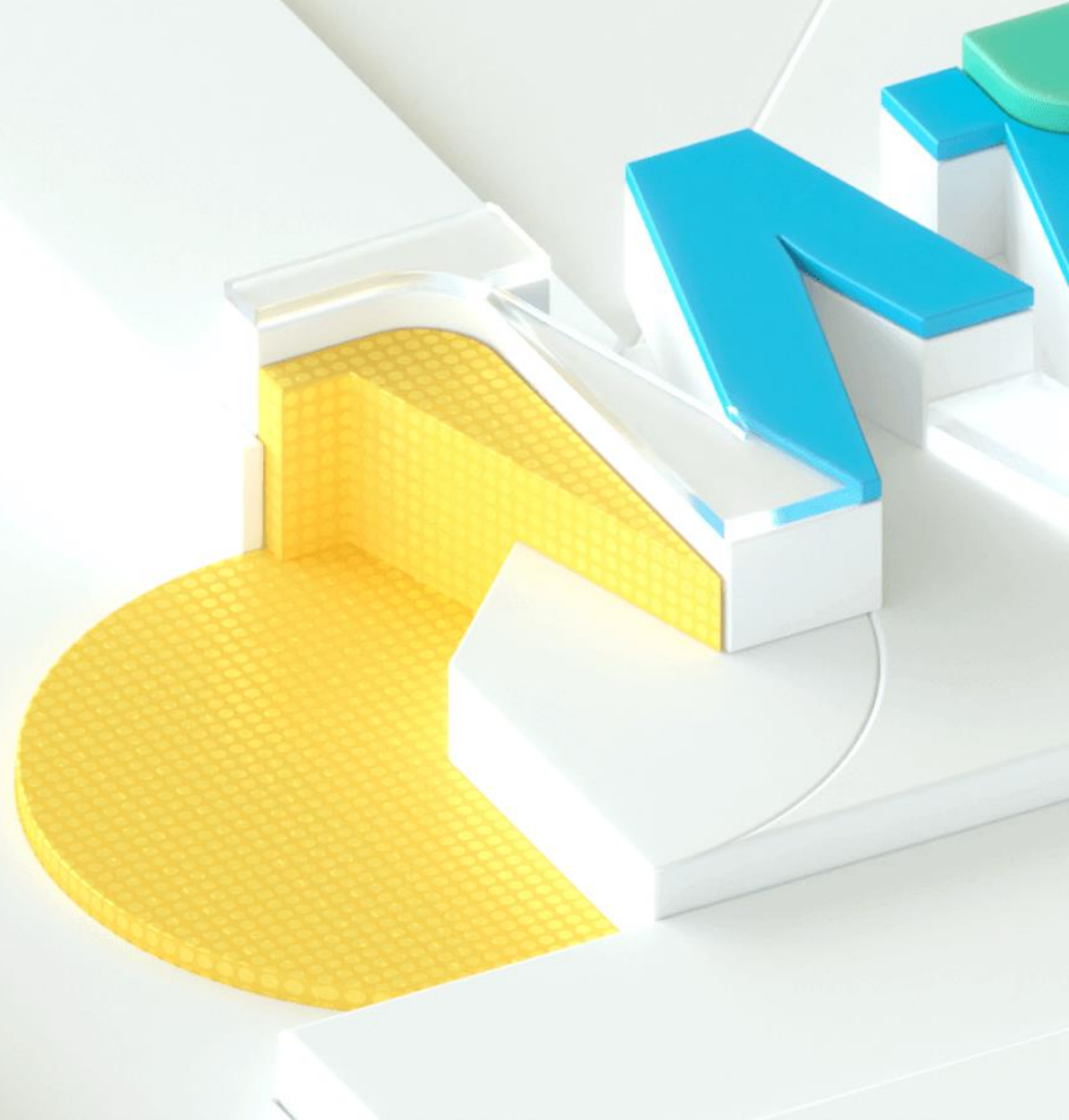
A Multi-LLM framework to attach the right
LLM to the right problem

You need specialized knowledge to handle business problems intelligently for different use cases.

How do we bake the cake?



Demonstration





Upgrades All Around

2023.10



2023.10 Feature Highlights

- Discover
 - Forecasting Options + Dialog Update
 - Bookmarking
 - Visual Tooltips [BETA]
 - Smart Insights added into Discover
 - Logarithmic Y-axis scales
- Query
 - Custom total functions per measure
 - Broken Hierarchical Sorting on SQL Sources
- Formulate
 - Multi-lingual names and descriptions for all formulated objects.

2023.10 Feature Highlights

- Infrastructure

- FIPS encryption mode [BETA]
- Encrypted connections to the Repository
- Support for encrypted connections to IMDB
- Solve Service as a Service
- Upgrade to Solve engine capacity
- Added Solve engine choices and settings
- Gen-AI integration option for AzureAI

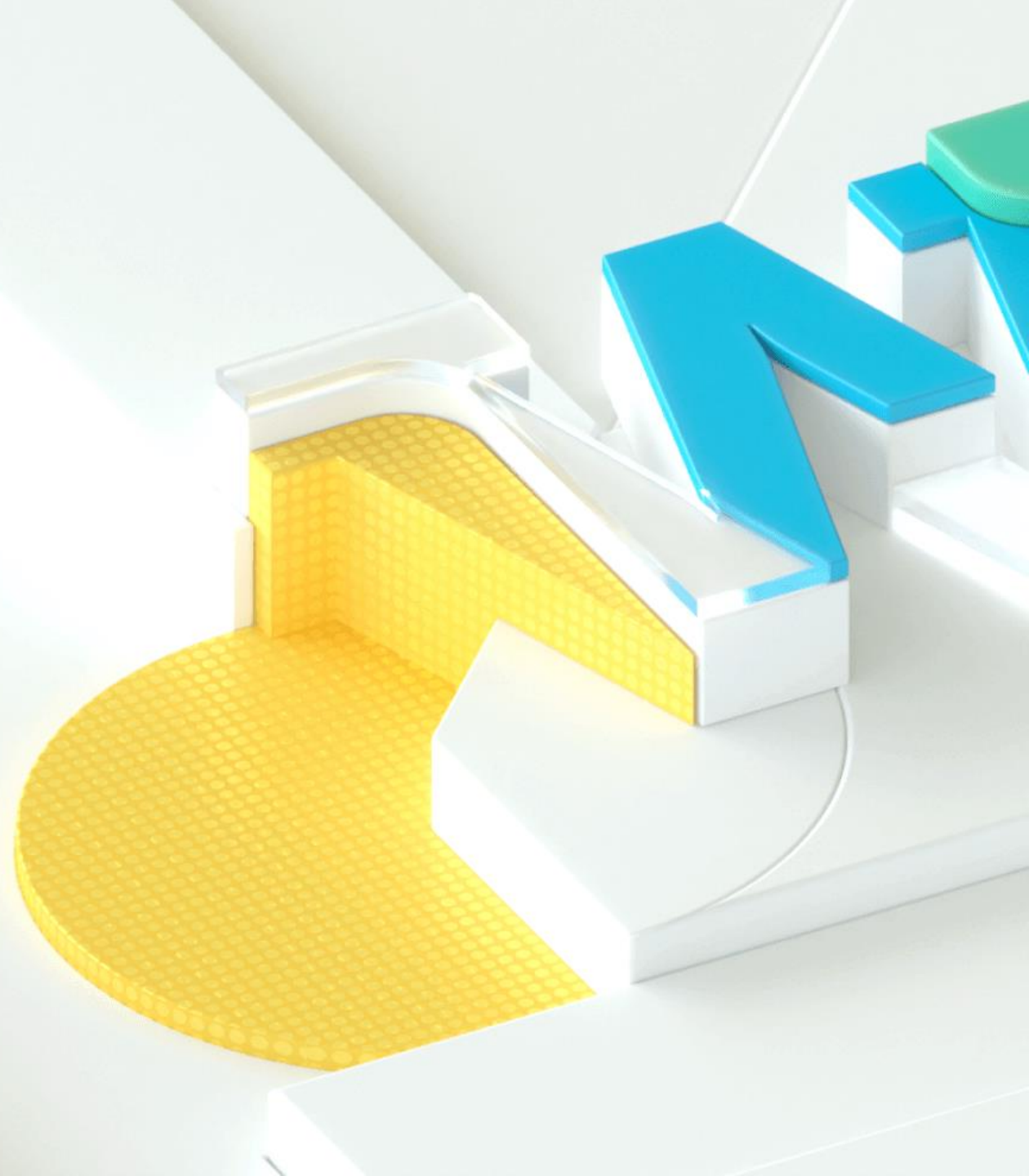
- Embedding / APIs

- API V3 with client SDK libraries in multiple languages [BETA]
- Create Discover reports; create Formulate formulas and lists;
- Get/set hierarchy and measure overlays; get/set hierarchy, measure and member security;
- Get/set Data Catalogs;
- Apply themes to content programmatically
- Support for slicers and legends on embedded Discover content

2023.10 Feature Highlights

- Model
 - Data flows widgets
 - JSON parser
 - Date-diff calculator
 - Data Pivot
 - Data modeling option to resync model with database
 - Connectors
 - Dremio
 - Google GA4
 - Box
 - Upgraded connectors for Twitter/X
 - "Or" join operator
 - Upgraded options for file targets in data flow
 - Capability to copy the join syntax from modeling
- Other
 - PDF compression (40%)
 - PDF bookmarking

Demonstration





Latecomers: Features that missed 2023.00

2023.01



2023.01 Feature Highlights

- Multi-Lingual Semantic Models
 - Create multi-lingual data/semantic models.
 - Options to use ChatGPT for auto-translation of metadata structures.
 - Multi-lingual models will allow different users to view the same analytic content in different languages, different numeric format styles and different date styles - without needing to create multiple versions of the content or model.
- Pre-Query Slicers/Filters
 - Set specific slicers (data filters) as 'pre-query slicers'.
 - Prompts users to make selections on these items before opening a Discover report or Present dashboard.

2023.01 Feature Highlights

- New connectors for SAP Datasphere and SAP HANA Cloud (beta)
- Support Multi Factor Authentication connection to for Power BI Premium Workspaces
- New option to enable direct query on custom data sources (added through custom connectors)
- Updated 'service account' authentication options for Google BigQuery
- New "Wait" node in master flow to handle timeouts



2023: The Last Mile of Analytics

2023.00



Pyramid 2023 Themes



New Pyramid application modules, Tabulate and Solve, for business and decision modeling

Speed up self-service via AI-augmented analytics

- Explain the Difference
- Fill the Blanks
- Recommended Queries
- OpenAI Integration

Enhance no-code analytics

- Custom Columns
- Virtual Column Calculations
- Aggregate Table support

Simplify self-service

- Publish Lite
- Publish Link Back

Customize the platform

- Personalisation
- Usage monitoring
- Email templates

New User Licensing Types

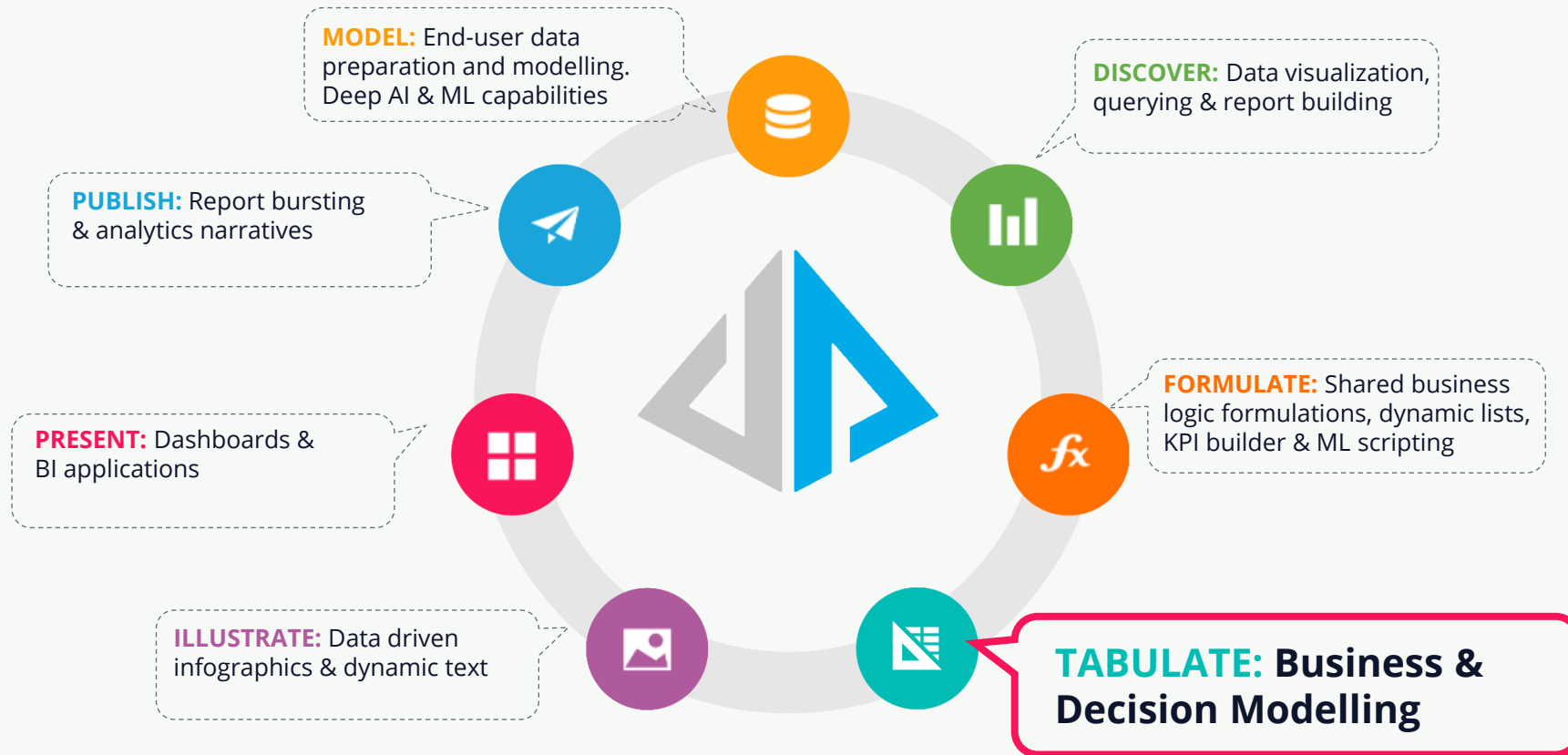
- Basic (Embedded)
- Analyst



... plus lots of [new features and customer & partner enhancements](#)

Pyramid 2023

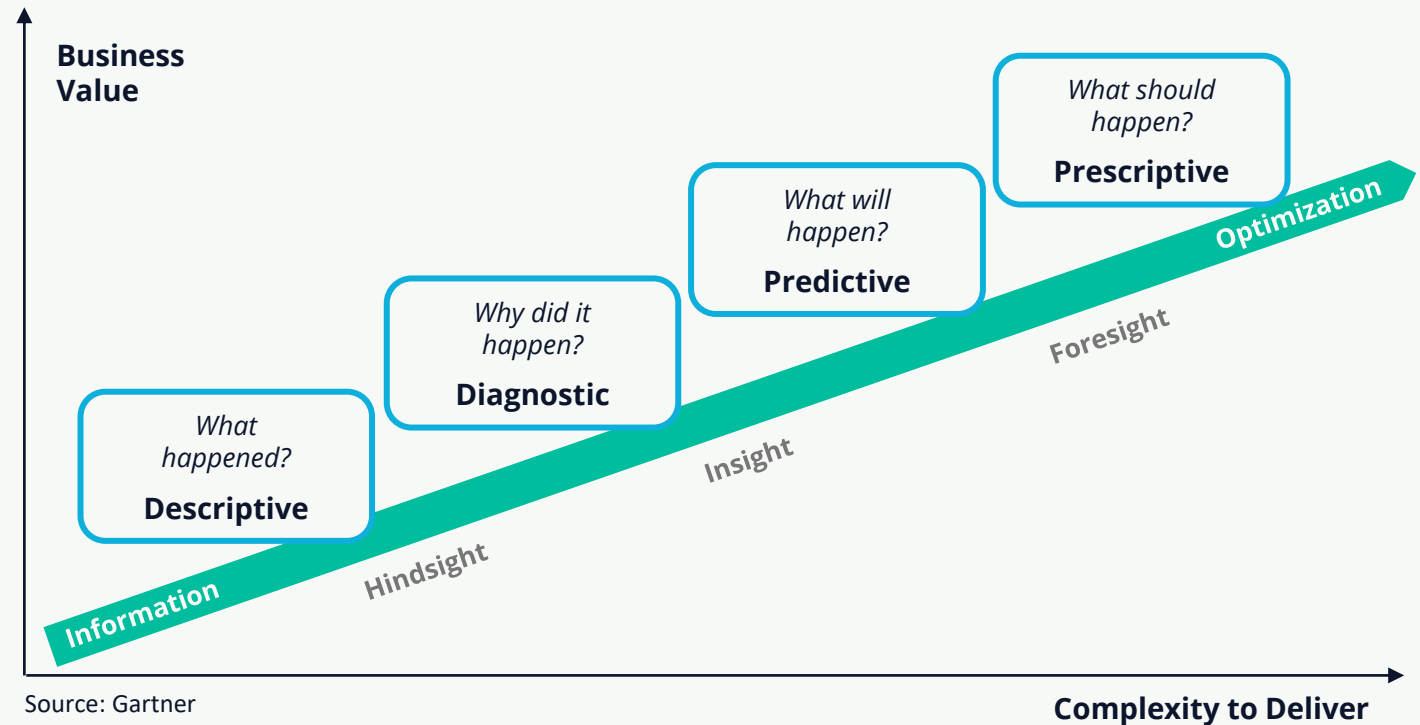
New application modules for business and decision modeling



Decision Intelligence Maturity

Last Mile analytics traditionally linked to an organization's analytics maturity

- **Descriptive** Analytics tells you what you have done, where you are now.
- **Diagnostic** Analytics identifies trends, relationships, cause and effect.
- **Predictive** Analytics tells what is going to happen through forecasting, classification etc.
- **Prescriptive** Analytics tells you how to change that future to something you want more.



Data Modelling → Semantic Modelling → Business Modelling → Decision Modelling

What is the Last Mile of Analytics?

- Drives Action & Decision Making
- Strategic Last Mile
 - Analytics Maturity
 - Finally deliver consumable Prescriptive Analytics
- Pragmatic Last Mile
 - Business modelling
 - Detailed formatting
 - Common platform for delivery of analytic insight

Prescriptive analytics are focused on the decision and/or the action.

Meeting the Challenge



Tabulate

- **Pyramid Survey of ~200 Customers**
- **66%** of users export Analytic content to spreadsheet-style regularly
 - 46% do it 75% or more of the time
 - 20% do it 50% or more of the time
- **90%** use the Desktop and **60%** use local disk
- Key Reasons:
 - Reformat grid content
 - Mash-up data from multiple queries/sources
 - Build charts on composite data
 - Use Excel formulas and Business logic
 - Use specialized Excel Tools



- Gap in user needs
- Spreadsheet Hell
- Leak in Governance
- Leak in Data Security
- 2+ sources of truth
- Inefficiencies

The next leap in Pyramid



Tabulate

- New “App” in the Platform
- Browser-Based spreadsheet in the platform
- Live Data
- Business Modeling with spreadsheet-type formulas
- Solves Pragmatic “Last Mile” Challenges
 - Atomic grid formatting
 - Query mash-ups
 - Multi-query visualizations
- Embeddable
 - Live Data in Present & Web Pages
 - Publishable output from Publish



- Reduction in functional gaps
- Plugs governance leaks
- Reduces inefficiencies



Next Leap...

Tabulate: The Last Mile in Analytics



Tabulate

- Strategic Last Mile
- Decision Modelling
- Optimization and **Prescriptive Analytics**
 - Optimization Problems
 - Real “what-if” analysis
 - Monte-Carlo analysis
- Spreadsheet-like business modeling
- Live Data
- Embeddable



Solve

Tabulate Plug-in

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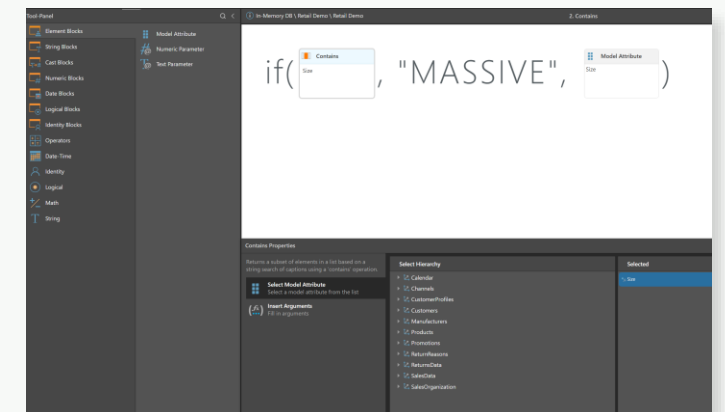
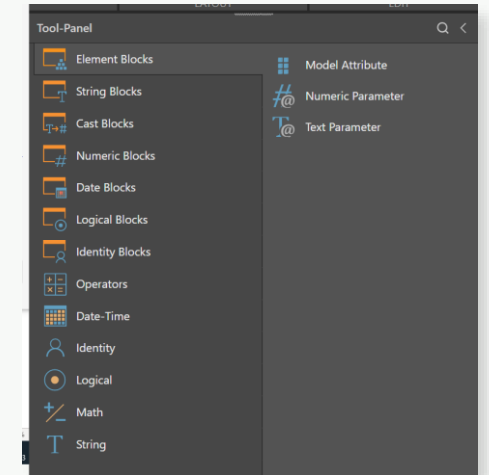
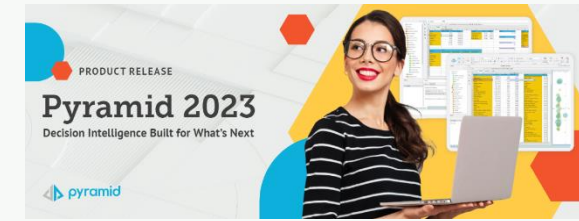
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Custom Columns

- A major new capability, Custom Columns allow users to extend the original data model with new column calculations that will be appended as new attributes or new measures to an existing model.
- Calculated Columns, calc is driven by the underlying relational tables. The calc will be applied at the row level of the underlying table.
 - This is important with direct query as it enables self-serve with no SQL coding by the user.
 - Calculated Columns is the only way to do row-level calcs by end users within.
 - Only other way is via SQL coding in the database.
- Demo Examples:
 - **Concat** - Concatenating Two Dimension Columns
 - **Replace** - Replacing a member with another value
 - **Cast** - Changing a data type in a column
 - **Date Add** - Adding date to a column
 - **Math** - Row level mathematical functions



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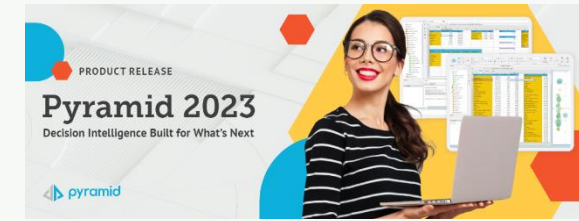
- Personalization dashboard: the Hub
- Usage monitoring
- Email templates

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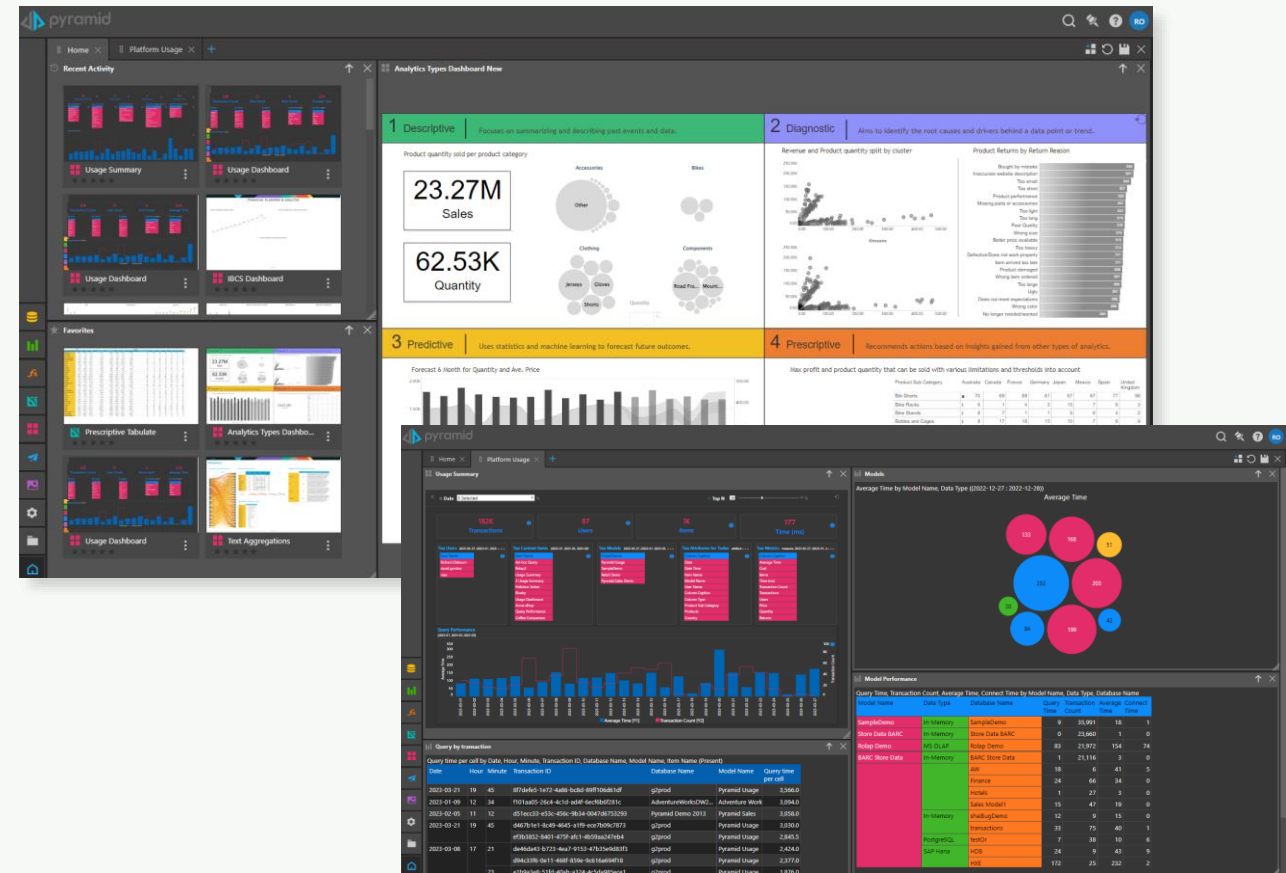
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Pyramid 2023

Customize the platform: The Hub



- The personalisation dashboard capability allows users to build a collage of existing content for the home page of the main client interface for Pyramid.
 - The same option is available in the administrative console.
 - Can be embedded in other applications – allowing end users to self-build their own content pages in another app without significant development by customers.
- Personalization dashboard elements can also be embedded into website.
 - The code for this embedding is automatically generated by Pyramid so you can simply paste it into your web code.



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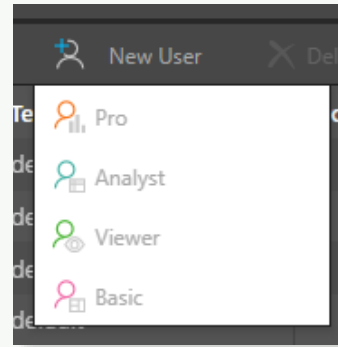
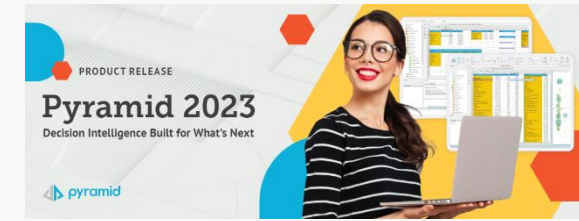
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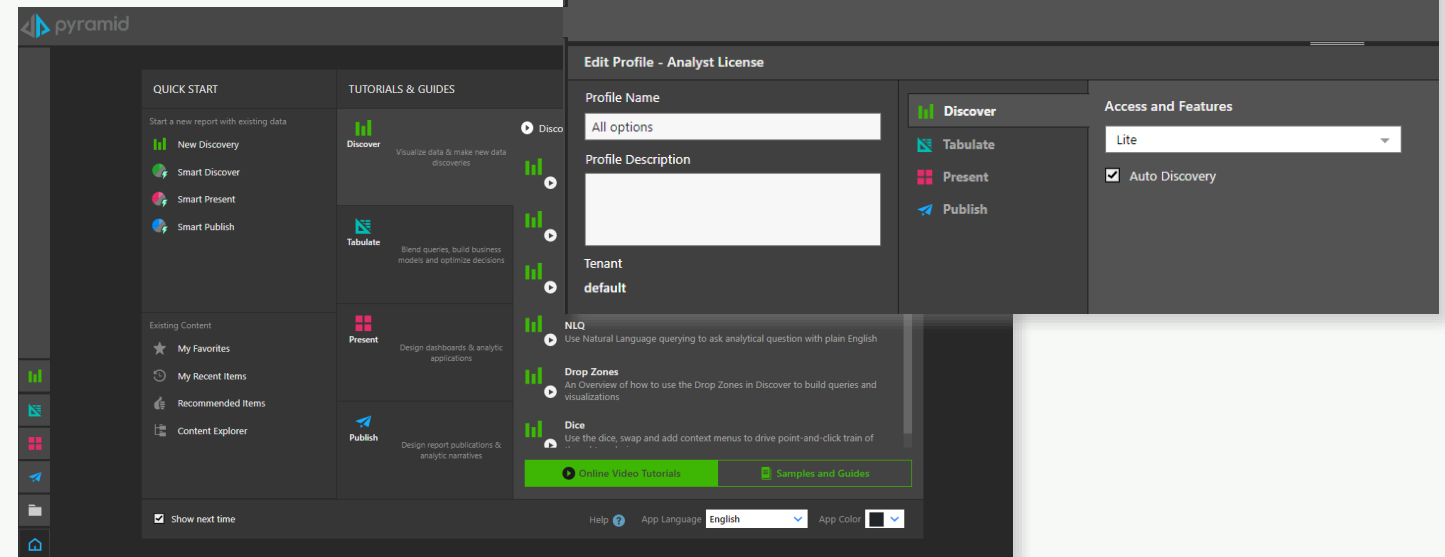
Pyramid 2023 Licensing Update

- New User types
 - Analyst (Viewer + experience)
 - Named Embed
- Analyst
 - Discover Lite
 - Present Lite
 - Publish Lite
 - Tabulate
- Profiles updates



Profiles (17)

Actions	Profile Name	Profile Description	Default	Tenant
<input type="checkbox"/>	All options		<input checked="" type="checkbox"/>	default
<input type="checkbox"/>	Discover, Present & Publish		<input type="checkbox"/>	1
<input type="checkbox"/>	All excl Tabulate		<input type="checkbox"/>	default
<input type="checkbox"/>	Discover only		<input type="checkbox"/>	default



New Pyramid license types

Data

- Data Prep
- DS / ML & Semantic Models
- Direct Query



Model

Analyze

- Discovery
- Share Business Logic
- Business & Decision Modelling



Formulate



Tabulate



Discover

Deploy

- Consumption & Deployment
- Dashboards
- Report Bursting



Illustrate



Present



Publish



NAMED EMBED



VIEWER



ANALYST



PROFESSIONAL

Learning Hub

- New Courses
 - Tabulate
 - Solve
- Updates
 - Admin & CMS
 - What's New
 - Existing courses
 - Updates based on new features
 - Full review / updates



Other Updates

- Pyramid 2023 and Microsoft Internet Explorer
 - With the release of Pyramid 2023, support for Microsoft IE 11 is deprecated and no longer supported as a vehicle for delivering the Pyramid client.
 - This follows several announcements by Microsoft on the [end of support for IE 11 on June 15 2022](#) on certain versions of Windows 10 and [disablement of IE 11](#) on certain versions of Windows 10 with the update of Microsoft Edge on February 14, 2023. Microsoft encourage the migration of IE 11 to Microsoft Edge to handle this scenario.
 - Pyramid will continue to support Microsoft Edge, Chrome, Safari, Firefox, Opera and other modern HTML5 browser technology options for maximum flexibility in choosing your preferred web browser.
 - Customers are asked to prepare to migrate users away from IE 11 with the introduction and deployment of Pyramid 2023.
- Ongoing support for Pyramid 2020
 - To enable an easier transition to the new 2023 version, Pyramid will continue to offer service packs for Pyramid 2020 for six months following the release of Pyramid 2023. However, these maintenance releases will offer solutions for critical issues and security related problems only. Importantly, Pyramid 2020 will still operate in IE11.
 - For other fixes, customers are encouraged to upgrade to Pyramid 2023. This will ensure the smooth running of your Pyramid instance and allow your users to take advantage of the many new features and enhancements available with Pyramid 2023.

Supporting Your Pyramid Journey

Pyramid Learning Live



- A series of free customer webinars focused providing a deep dive into the Platform from a technical perspective
- Free access to a library of 70+ session recordings
- Every 2 weeks

User Community



- A monthly community meeting, product news, & Q&A forum
- Register and review product 'ideas'
- Available 24 x 7

Customer Newsletter



Greetings and best wishes from everyone at Pyramid Analytics! We hope you are looking forward to celebrating the end of 2021, and the start of the new year.

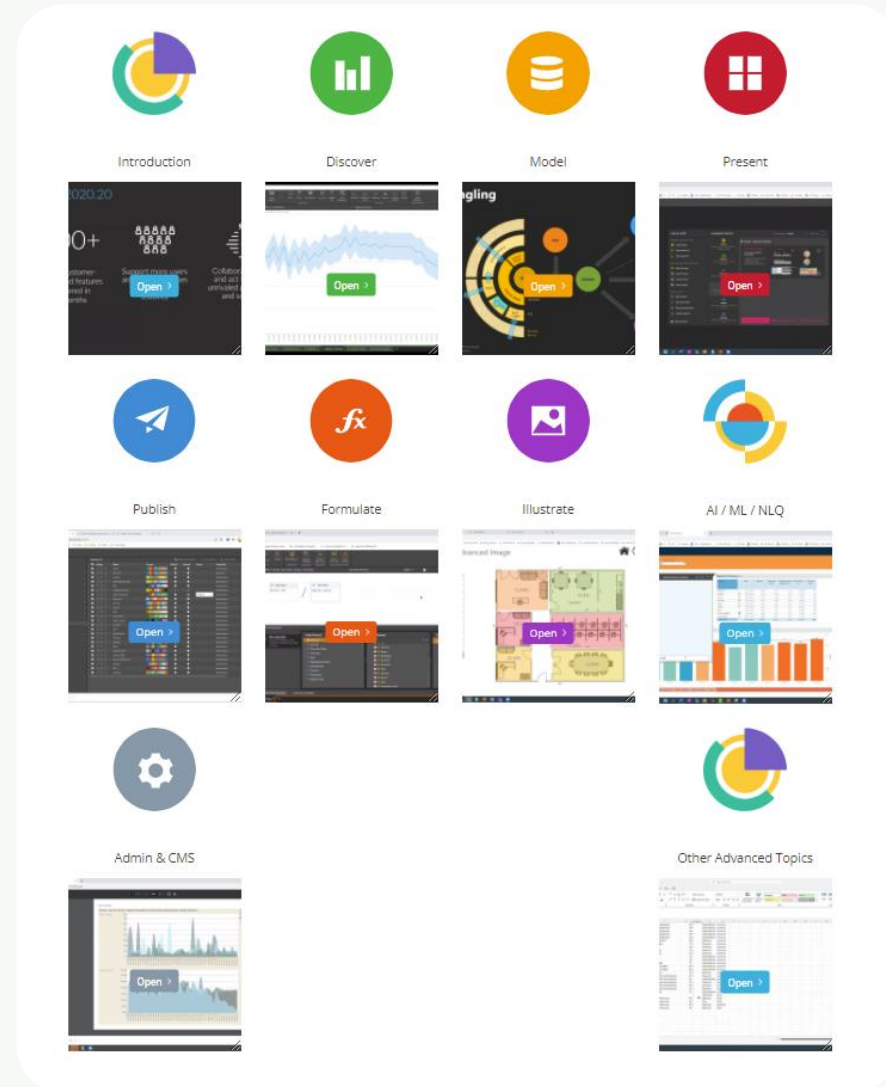
This edition includes:

1. Pyramid Innovators Monthly Meeting
2. 2020.20 Release
3. BARC Spotlight
4. Tips & Tricks
5. Upcoming Events

- Latest news, customer stories, events and Pyramid tips & techniques
- Monthly series

Pyramid Learning Live

- A lists of the questions raised during this session will be posted on the User Community with responses
- Visit the Pyramid Analytics website and the Learning Live registration page to access the library of 80+ recordings of previous sessions



Learning Live Series

Date	Topic	Description
14-Mar-24	Pyramid Use Cases forEmbed	Learn about various embed use cases and examples on the Pyramid platform
28-Mar-24	Formulate	Learn about various formulate use cases and examples on the Pyramid platform
11-Apr-24	PQL Master Class 1	This Webinar is the first part of our PQL Master class and will Cover a variety of use cases and examples using the Pyramid Query Language
25-Apr-24	PQL Master Class 2	This Webinar is the second part of our PQL Master class and will Cover a variety of use cases and examples using the Pyramid Query Language
9-May-24	Introduction to Discover Lite	Cover the possibilities of Discover Lite as part of the Analyst License
23-May-24	Using Present Lite and Publish Lite	Cover Use Cases with Present Lite and Publish Lite, these Apps are part of the Analyst License and offer a powerful upgrade to a Viewer who want to deliver more value
6-Jun-24	Python and R in Pyramid	Learn about Python and R use cases and examples
20-Jun-24	Advanced Model Use Cases	Advanced model use cases, for you to follow. The Use Cases are addressed to a more experienced user group, that already has taken our Model Training Courses in the Learning Hub
27-Jun-24	Deep Dive to Discover	Detailed look into the Discover App and reveal some short cuts and tips for more advanced users of the Platform

Thank you

